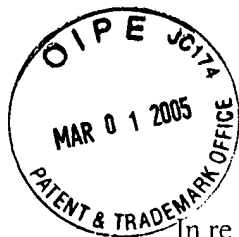


Shw/AF



**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No. Q64314

JOO-SEON KIM

Appln. No. 10/066,651

Group Art Unit: 2133

Confirmation No. 4497

Examiner: Joseph D. TORRES

Filed: February 6, 2002

For: REED-SOLOMON DECODER FOR PROCESSING (M) OR (2M) BIT DATA, AND  
DECODING METHOD THEREFOR

**SUBMISSION OF FOREIGN OFFICE ACTION FOR EXAMINER'S CONSIDERATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

For the benefit of the Examiner, Applicant hereby notifies the U.S. Patent and Trademark Office of an office action Communication from the Chinese Patent Office in connection with corresponding application no. 02107081.4.

The office action cites documents that Applicant has previously submitted in an Information Disclosure Statement filed on November 17, 2003.

Applicant encloses herewith a copy of the Communication citing the previously submitted documents, together with an English-language version of at least that portion of the Communication indicating the degree of relevance found by the foreign patent office.

SUBMISSION OF FOREIGN OFFICE ACTION  
U.S. Application No. 10/066,651  
Attorney Docket No. Q64314

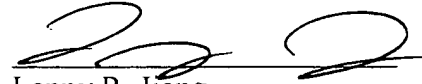
Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER



Lenny R. Jiang  
Registration No. 52,432

Date: March 1, 2005



## TEXT OF THE FIRST OFFICE ACTION

As recited in the description, the present application relates to a reed-solomon decoder for processing (m) or (2m) bit data, and decoding method thereof. According to the examination, the opinions are now provided as follows:

1. The technical solution sought for protection in the independent Claim 1 does not possess novelty, which does not comply with the provision of Article 22, paragraph 2 of the Patent Law of China. Reference 1 (US6024485A) discloses an error correction decoding circuit, with the following technical features: "an error correction decoding circuit (decoder), wherein coded data input from the data input terminal is stored in the buffer memory (storing part); subsequently, interleaving is undone, the data is converted to a coded sequence and input to the syndrome circuit; based on the syndrome thereby obtained, error positions and magnitudes are determined by the error position/magnitude detecting circuit (calculation part); error position data in the buffer memory is read by the correction circuit, the errors are corrected, and the data is written to the buffer memory; all data is decoded and output by the decoded data output terminal (referring to column 3, lines 1-19 and Fig. 18 in the description of Reference 1)". It is certain that the reference 1 contains a control part for controlling the calculating, correcting and decoding processes. Thus, the reference 1 has disclosed all the technical features of the independent Claim 1. Besides, the technical solution disclosed in the reference 1 and the technical solution sought for protection in the Claim 1 belong to the same technical field, and produce the same technical effect. Therefore, the Claim 1 does not possess novelty.

2. The additional technical feature of the Claim 3 has been disclosed by "a parallel RS decoder, each decoder independently completes the decoding process (referring to page 148, column 2, lines 6-10 and Fig. 6 in reference 2)" in reference 2 (Parallel Error Correction using Spectral Reed-Solomon Codes), and in the reference 2 has the same function of increasing the decoding speed as that in the present invention. That is, the reference 2 gives the inspiration of applying the aforesaid parallel structure into the technical solution of the reference 1 so as to further solve its technical problem. It is obvious that those skilled in the art can obtain the technical solution sought for protection in this claim on the basis of the decoding circuit disclosed in the reference 1 combined with the parallel structure disclosed in the reference 2. Therefore, the Claim 3 does not possess inventiveness as prescribed in Article 22, paragraph 3 of the Patent Law of China.

3. The technical solution sought for protection in the independent Claim 10 does not possess inventiveness, which does not comply with the provision of Article 22, paragraph 3 of the Patent Law of China. Reference 1 (US6024485A) discloses an

error correction decoding circuit, with the following technical features: “an error correction decoding circuit (decoder), wherein coded data input from the data input terminal is stored in the buffer memory (storing part); subsequently, interleaving is undone, the data is converted to a coded sequence and input to the syndrome circuit; based on the syndrome thereby obtained, error positions and magnitudes are determined by the error position/magnitude detecting circuit (calculation part); error position data in the buffer memory is read by the correction circuit, the errors are corrected, and the data is written to the buffer memory; all data is decoded and output by the decoded data output terminal (it is certain that there is a control part for controlling the storing, calculating, and correcting processes. ) (referring to column 3, lines 1-19 and Fig. 18 in the description in Reference 1)”. The difference between the Claim 10 and the reference 1 lies in that two parallel RS cores are controlled by RS core control parts to conduct the decoding processes. However such difference has already been disclosed by “a parallel RS decoder, each decoder independently completes the decoding process (inevitably accomplished under the control of the control part) (referring to page 148, column 2, lines 6-10 and Fig. 6 in reference 2)” in reference 2, and in the reference 2 has the same function of increasing the decoding speed as that in the present invention. That is, the reference 2 gives the inspiration of applying the aforesaid parallel structure into the technical solution of the reference 1 so as to further solve its technical problem. It is obvious that those skilled in the art can obtain the technical solution sought for protection in this claim on the basis of the decoding circuit disclosed in the reference 1 combined with the parallel structure disclosed in the reference 2. Therefore, the Claim 10 does not possess inventiveness.

4. The technical solutions sought for protection in the Claims 5, 8, 28, 29 are not clear, which does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China. These claims seek protection for a decoder, and their additional technical features only define a mathematic formula, which is not of structural feature for defining the protection scope. As a result, the protection scopes of these claims are not certain.

5. The technical solution sought for protection in the independent Claim 15 does not possess novelty, which does not comply with the provision of Article 22, paragraph 2 of the Patent Law of China. The decoding method seeking protection from the independent Claim 15 is the method employed by the decoder seeking protection from the independent Claim 1, referring to the comments on the Claim 1 for details.

6. The technical solution sought for protection in the Claim 16 does not possess inventiveness, which does not comply with the provision of Article 22, paragraph 3 of the Patent Law of China. For those skilled in the art, it is a common knowledge that the data is read in (2m) bit units. It is apparent that those skilled in the art can obtain the technical solution sought for protection in the Claim 16 on the basis of the reference 1 combined with the aforesaid common knowledge. Moreover, such combination does not produce unexpected technical effect. Therefore, the technical

solution sought for protection in the Claim 16 does not possess prominent substantive features or represent a notable progress, and thus does not possess inventiveness.

7. The technical solutions sought for protection in the Claims 18, 30 do not possess inventiveness, which does not comply with the provision of Article 22, paragraph 3 of the Patent Law of China. The decoding method seeking protection from the Claims 18, 30 is just the method employed by the decoder seeking protection from the Claim 3, referring to the comments on the Claim 3 for details.

8. The Claim 19 seeks protection for a method; however “first errata location polynomial calculation” and “first error location/value calculation” define the structure of the product. As a result, the protection scope of the claim is not certain, which does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China.

9. The technical solutions sought for protection in the Claims 23, 24 are not clear, which does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China. According to the Claims 23, 24, it is not certain how to calculate an error value and an error location from “the first and second errata location polynomials and the first and second syndrome polynomials”. According to the Claim 23, it is not certain how to calculate “eraser location polynomial”. Therefore, the protection scopes of the aforesaid claims are not clear.

10. “An operation of the Reed-Solomon decoder”, “memory” and “second RS core” in the Claim 25 are not mentioned in the claim which the Claim 25 refers to, which renders the protection scope of the claim unclear. Thus, the Claim 25 does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China.

11. Some unnecessary parentheses appear in the claims, because the contents in parentheses are neither reference symbols nor necessary words. The applicant should make amendment. For example, “(m)”, “(2m)” in the Claim 5 and “(j=0, 1...N-K-1), (UM), (DM)” in the Claim 6 etc.

12. The claims contain some unclear points, for example, “m, N, K” in the Claims 5, 6, 8, 9, 12, 14, 20-29 is not defined. Thus, the protection scopes of the aforesaid claims are not clear, which does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China.

13. The Claims 28, 29 are subordinate to the independent Claim 10, and thus should follow the independent Claim 10, instead of the independent Claim 24. The Claim 26 is subordinate to the independent Claim 23, and thus should follow the independent Claim 23, instead of the independent Claim 24.

Based on the above reasons, the application can not be granted the right of patent under the present text. If the applicant makes amendment to the application documents according to the aforesaid examination opinions within four months to overcome the formal and substantive defects, the present application is hopefully to be granted the right of patent. To note, any amendment to the application documents shall not go beyond the scope of the disclosure contained in the initial description and claims so as to comply with the provision of Article 33 of the Patent Law of China. Besides, the applicant should submit a copy with the amendments marked thereon and replacement sheet, and ensure the consistency of the two parts mentioned above.

Examiner: Yang Hongli



Code: 3117

WAY



# 中华人民共和国国家知识产权局

PJGH 2654

邮政编码: 100101 北京市朝阳区北辰东路 8 号汇宾大厦 A0601 北京市柳沈律师事务所 马莹, 邵亚丽	发文日期 
申请号: 021070814 	
申请人: 三星电子株式会社	
发明创造名称: 处理(m)或(2m)比特数据的里德-索罗门解码器及其解码方法	

## 第一次审查意见通知书

- ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。  
☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。
- ☒ 申请人要求以在:  
    KR      专利局的申请日      2001 年 02 月 07 日为优先权日,  
            专利局的申请日      年    月    日为优先权日,  
            专利局的申请日      年    月    日为优先权日,  
            专利局的申请日      年    月    日为优先权日,  
            专利局的申请日      年    月    日为优先权日。  
☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。  
☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第 30 条的规定视为未提出优先权要求。
- ☐ 经审查, 申请人于:  
    年    月    日提交的      不符合实施细则第 51 条的规定;  
    年    月    日提交的      不符合专利法第 33 条的规定;  
    年    月    日提交的
- 审查针对的申请文件:  
☒ 原始申请文件。 ☐ 审查是针对下述申请文件的  
申请日提交的原始申请文件的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的说明书摘要,      年    月    日提交的摘要附图。
- ☐ 本通知书是在未进行检索的情况下作出的。  
☒ 本通知书是在进行了检索的情况下作出的。  
☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):  
    编号      文件号或名称      公开日期 (或抵触申请的申请日)  
    1      US6024485A      2000-02-15  
    2      Journal of Optical communication: Parallel Error Correction using Spectral Reed-Solomon Codes      1997-08-01
- 审查的结论性意见:



☐ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☐ 说明书不符合专利法第 26 条第 3 款的规定。
- ☐ 说明书不符合专利法第 33 条的规定。
- ☐ 说明书的撰写不符合实施细则第 18 条的规定。
- ☐

☒ 关于权利要求书:

- ☒ 权利要求 1, 15 不具备专利法第 22 条第 2 款规定的新颖性。
- ☒ 权利要求 3, 10, 16, 18, 30 不具备专利法第 22 条第 3 款规定的创造性。
- ☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☐ 权利要求 不符合专利法第 26 条第 4 款的规定。
- ☐ 权利要求 不符合专利法第 31 条第 1 款的规定。
- ☐ 权利要求 不符合专利法第 33 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。
- ☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☒ 权利要求 5, 6, 8, 9, 12, 14, 19-29 不符合专利法实施细则第 20 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 21 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 22 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 23 条的规定。
- ☐

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。
- ☐

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 4 页, 并附有下列附件:

- ☒ 引用的对比文件的复印件共 2 份 5 页。 ☐

审查员: 杨红丽

2004 年 10 月 18 日



审查部门 通信审查部



## 第一次审查意见通知书正文

申请号：021070814

如说明所述，本申请涉及一种处理(m)或(2m)比特数据的里德-索罗门解码器及其解码方法，经审查，提出以下审查意见。

1. 独立权利要求 1 要求保护的技术方案不具备新颖性，不符合专利法第二十二条第二款的规定。对比文件 1 (US6024485A)公开了一种纠错译码电路，并具体公开了以下技术特征：“一种纠错译码电路(解码器)，经输入端输入的编码数据存储在缓冲存储器(存储部分)中，然后解除其交错状态作为编码序列输入到校正子电路，根据这样得到的校正子信号由差错位置/大小检测电路(计算部分)求取差错位置及其大小，校正电路读出缓冲存储器中所存的差错位置数据进行差错校正后写入缓冲存储器，最后的译码数据由译码数据输出端输出(参见对比文件 1 的说明书第 3 栏第 1 行至第 19 行，附图<sup>12</sup>(18))”，在对比文件 1 中必然存在一个控制部分对计算，纠错，译码过程进行控制，由此可见，该对比文件 1 已经公开了独立权利要求 1 的全部技术特征，且该对比文件所公开的技术方案与该权利要求所要求保护的技术方案属于同一技术领域，并能产生相同的技术效果，因此该权利要求不具备新颖性。

2. 权利要求 3 的附加技术特征被对比文件 2 (Parallel Error Correction using Spectral Reed-Solomon Codes)中所述的“一种并行的 RS 解码器，每一个解码器独立地完成解码过程(参见对比文件 2 的第 148 页第 2 栏第 6 行至第 10 行，附图 6)”所公开，且其在对比文件 2 中所起的作用与在本发明中所起的作用相同，都是用于提高解码速度，即对比文件 2 给出了将上述并行结构应用到对比文件 1 的技术方案以进一步解决其技术问题的启示，由此可见，在对比文件 1 译码电路的基础上结合对比文件 2 中的并行结构得出该权利要求要求保护的技术方案，对本领域技术人员来说是显而易见的，因此权利要求 3 不具备专利法第二十二条第三款规定的创造性。

3. 独立权利要求 10 要求保护的技术方案不具备创造性，不符合专利法第二十二条第三款的规定。对比文件 1 (US6024485A)公开了一种纠错译码电路，并具体公开了以下技术特征：“一种纠错译码电路(解码器)，经输入端输入的编码数据存储在

缓冲存储器（存储部分）中，然后解除其交错状态作为编码序列输入到校正子电路，根据这样得到的校正子信号由差错位置/大小检测电路（计算部分）求取差错位置及其大小，校正电路读出缓冲存储器中所存的差错位置数据进行差错校正后写入缓冲存储器，最后的译码数据由译码数据输出端输出（必然存在一个控制部分来控制存储、计算，纠错过程）（参见对比文件 1 的说明书第 3 栏第 1 行至第 19 行，附图 18）”，该权利要求与对比文件 1 的区别在于由两个并行的 RS 内核在内核控制部分的控制下来完成解码过程，但是这一区别被对比文件 2 中所述的“一种并行的 RS 解码器，每一个解码器独立地完成解码过程（必然在控制部分控制下完成）（参见对比文件 2 的第 148 页第 2 栏第 6 行至第 10 行，附图 6）”所公开，且其在对比文件 2 中所起的作用与在本发明中所起的作用相同，都是用于提高解码速度，即对比文件 2 给出了将上述并行结构应用到对比文件 1 的技术方案以进一步解决其技术问题的启示，由此可见，在对比文件 1 译码电路的基础上结合对比文件 2 中的并行结构得出该权利要求要求保护的技术方案，对本领域技术人员来说是显而易见的，因此权利要求 10 不具备创造性。

4. 权利要求 5, 8, 28, 29 要求保护的技术方案不清楚，不符合实施细则第二十条第一款的规定。这些权利要求要求保护一种解码器，而其附加技术特征仅仅描述了一个数学公式，并不是用来限定保护范围的结构特征，使得这些权利要求确定的保护范围不清楚。

5. 独立权利要求 15 保护的技术方案不具备新颖性，不符合专利法第二十二条第二款的规定。独立权利要求 15 所要求保护的解码方法就是独立权利要求 1 要求保护的解码器所采用的解码方法，具体参见对权利要求 1 的评述。

6. 权利要求 16 所要求保护的技术方案不具备创造性，不符合专利法第二十二条第三款的规定。对本领域技术人员来说，以  $2^m$  比特为单位读取数据是公知常识，由此可见，在对比文件 1 的基础上结合上述公知常识得到权利要求 1<sup>16</sup>要保护的技术方案，对所属技术领域的技术人员来说是显而易见的，而且这种结合并没有产生预料不到的效果，因此该权利要求要求保护的技术方案不具备突出的实质性特点和显著的进步，该权利要求不具备创造性。

7. 权利要求18, 30保护的技术方案不具备创造性, 不符合专利法第二十二条第三款的规定。权利要求18, 30所要求保护的解码方法就是权利要求3要求保护的解码器所采用的解码方法, 具体参见对权利要求3的评述。

8. 权利要求19要求保护一种方法, 而其附加技术特征中的“第一误符位置多项式计算部分”和“第一错误位置/值计算部分”是对产品结构的描述, 使得该权利要求确定的保护范围不清楚, 不符合实施细则第二十条第一款的规定。

9. 权利要求23, 24要求保护的技术方案不清楚, 不符合实施细则第二十条第一款的规定。从权利要求23, 24的描述中无法确定如何“根据第一和第二误符位置多项式<sup>23</sup>和第一和第二校验子多项式”来计算错误位置和错误值的, 从该权利要求<sup>24</sup>23中所述的无法得知如何计算得出“删除算子位置多项式”的, 使得这些权利要求所确定的保护范围不清楚。

10. 权利要求25中出现的“里德-索罗门解码器操作”和“存储器”, “第二RS内核”在其引用的权利要求中没有出现, 使得该权利要求确定的保护范围不清楚, 不符合实施细则第二十条第一款的规定。

11. 权利要求书中出现大量不必要的括号, 括号里的内容既不是附图标记又不是必要的文字, 申请人应对其进行修改。例如权利要求5中的“(m), (2m)”, 权利要求6中的“(j=0, 1, ..., N-K-1), (UM), (DM)”等。

12. 权利要求中出现大量不清楚的地方, 例如权利要求5, 6, 8, 9, 12, 14, 20-29中的“m, N, K”没有定义, 使得这些权利要求所确定的保护范围不清楚, 不符合实施细则第二十条第一款的规定。

13. 权利要求28, 29是独立权利要求10的从属权利要求, 应写在独立权利要求10的后面而不能写在独立权利要求24的后面, 权利要求26是独立权利要求23的从属权利要求, 应写在独立权利要求23的后面而不能写在独立权利要求24的后面。

基于上述理由, 本申请按照目前的文本还不能被授予专利权。如果申请人在指定的四个月答复期限内按照本通知书提出的审查意见对申请文件进行修改, 克服所存在的实质缺陷和形式缺陷, 则本申请可望被授予专利权。请申请人注意, 对申请

6. 예상 통신비는 유통 경로 전달 서버가 사용자가 계약하고 있는 프로바이더 및 회선(캐리어)업자의 DB에 조회함으로써 취득할 수 있다고 가정한다. 통신비는 회선 사용료와 프로바이더 요금을 더불어 3분당 10엔(단수절상)으로 계산한다.

도 9는 다른 시뮬레이션 예를 나타낸다.

(조건)

1. 도 6에 대응하는 온디맨드형 분배와 멀티캐스트형 분배와 브로드캐스트형 분배의 3가지의 유통 경로의 경우를 고려한다.[온디맨드형 분배, 멀티캐스트형 분배의 통신비는 회선 사용료와 프로바이더 요금을 더불어 3분당 10엔(단수절상)으로 계산.]

2. 인터넷을 경유하면 10분, 데이터 방송을 경유하면 1분으로 다운로드 가능한 콘텐츠 데이터를 온디맨드형과 멀티캐스트형과 브로드캐스트형의 3가지로 분배한다고 가정한다.

3. 멀티캐스트형 분배 실행 시에는 240분에 1회의 분배를 행하고, 다운로드 시간은 10분으로 한다.

4. 브로드캐스트형 분배 실행 시에는 480분에 1회의 분배를 행하고 다운로드 시간은 1분으로 한다. 방송 수신료는 1분당 10엔이라고 가정.

5. 방송 이외의 예상 통신비는 유통 경로 전달 서버가 사용자가 계약하고 있는 프로바이더 및 회선(캐리어)업자의 DB에 조회함으로써 취득할 수 있다고 가정한다.

또한, 도 9의 예인 경우에는 멀티캐스트형 분배의 스케줄을 알 수 있는 경우, 분배 시간에 맞춰서 회선을 다시 접속하면 된다. 또한, 브로드캐스트형 분배의 스케줄을 알 수 있는 경우, 키의 취득 후 회선을 폐쇄하면 된다.

발명의 효과

이상과 같이, 본 발명에 따르면 사용자가 희망하는 분배 수단에 의한 콘텐츠 데이터를 분배할 수 있어 사용자 단말에서 유통 경로 정보를 참조하여, 콘텐츠 데이터를 구입하는데 적합한 분배 수단을 선택할 수 있다. 또한, 자기의 형편에 맞춰서 최적이라고 생각되는 분배 수단을 선택할 수 있어 종래에 있었던 분배 시의 불만없이 콘텐츠 데이터를 입수할 수 있다.

또한, 콘텐츠 데이터 분배 사업자는 회선의 과부하, 분배의 장시간화 등의 트러블을 회피하여 안정적으로 콘텐츠 데이터를 사용자에게 공급할 수 있다는 장점이 있다.

(57) 청구의 범위

청구항 1.

콘텐츠 데이터 및 권리자 정보를 축적한 콘텐츠 관리 서버를 통해 사용자 단말에 사용자로부터의 요구에 따라서 콘텐츠 데이터를 분배하는 콘텐츠 데이터 분배 시스템에 있어서,

상기 콘텐츠 관리 서버와 사용자 단말 간에 콘텐츠 데이터 분배의 요구가 있었을 때에 콘텐츠 데이터의 분배를 행하는 복수의 분배 서버 및 유통 경로 전달 서버를 포함하고,

상기 콘텐츠 관리 서버는, 사용자 단말로부터의 분배 요구에 따른 조건과 상기 분배 서버의 가동 상황을 참조하여 현황의 콘텐츠 공급 능력과의 비교를 행하여, 설정한 조건으로 사용자 단말에 콘텐츠 데이터를 공급하는 능력이 있는 분배 서버를 특정하고 또한 특정된 분배 서버와 그 분배 서버로부터의 분배에 요하는 과금으로 이루어지는 유통 경로 정보를 유통 경로 전달 서버와 사용자 단말로 송신하고,

文件的修改应当符合专利法第三十三条的规定，不得超出原说明书和权利要求书记载的范围，并且申请人在提交修改文本时应当提交修改底稿及替换页并确保上述两部分在内容上的一致性。

审查员：杨红丽

代码：3117